

CLAIMS

What is claimed is:

1. A method for configuring a network, said method comprising the steps of:

dynamically determining when a component is added to a node of said network; and

in response to said dynamically determining step, configuring said network to provide support for said component.

2. The method of Claim 1, further comprising the steps of:

registering an OS with an management system of said network to provide a notification when said component is added; and

alerting said OS that said component is added during said configuring step.

3. The method of Claim 2, wherein said dynamically determining step is completed by said management system and includes the step of monitoring a network via a sweep operation for visible configuration changes.

4. The method of Claim 2, wherein said network includes a switch and said dynamically determining step includes the steps of:

detecting an addition of said component to a link of

5 said switch; and

6 in response to said detecting step, signaling said
7 management system via a trap message that said component
8 is on said network

1 5. The method of Claim 2 further comprising the steps
2 of associating said component to at least one partition
3 and to an OS within said at least one partition.

1 6. The method of Claim 5, further comprising the steps
2 of:

3 detecting a partition of said network to which said
4 component has been associated; and

5 notifying said OS of said component only when said
6 OS is also associated with said partition.

1 7. The method of Claim 6, further comprising the steps
2 of:

3 updating a component table available to said OS with
4 information about said component; and

5 providing OS support to all components registered in
6 said component table.

1 8. A system for configuring a network, said system
2 comprising:

3 a network manager that dynamically determines when a
4 component is added to a node of said network and
5 configures said network to provide support for said
6 component; and

7 a network administration utility that, and in
8 response to said network manager dynamically determining
9 when a component is added, notifies an OS registered with
10 said network administration utility that said component
11 is added.

1 9. The system of Claim 8, wherein said network manager
2 determines when said component is added by periodically
3 monitoring said network for configuration changes.

1 10. The system of Claim 8, wherein said network manager
2 determines when said component is added by receiving a
3 packet from said component indicated that said component
4 is present on said network.

1 11. The system of Claim 8, further comprising a
2 registration table for registering said OS with said
3 network administration utility for notification of an
4 addition of a component; and

1 12. The system of Claim 11, further comprising:
2 a partitioning mechanism that associates said
3 component with one or more of a plurality of partitions
4 of said network; and

5 wherein said network manager notifies said OS only

~~when said OS is associated with a same one of said one or more partitions.~~

13. The system of Claim 12, further comprising a component registry available to said OS that is updated with information about said component when said component is detected, wherein said OS provides support to all components registered in said component registry to which it has access permission.

1 14. A network comprising:

2 a switch;

3 at least one node linked to said switch for adding
4 components;

5 a network manager that dynamically determines when a
6 component is added to said at least one node of said
7 network and configures said network to provide support
8 for said component;

9 an operating system; and

10 a network administration utility that, and in
11 response to said network manager, dynamically determining
12 when a component is added, notifies an OS registered with
13 said network administration utility that said component
14 is added.

15. The network of Claim 14, further comprising:

16 a partition agent that associates said component to
17 one or more partitions of said network and controls
18 access to said component via a partition monitoring
19 function; and

20 wherein said OS is notified of said component only
21 when said OS has an access permission to a same one of
22 said one or more partitions.

1 16. The network of Claim 14, wherein said network is a
2 system area network.

1 17. A computer program product comprising:

2 a computer readable medium; and

3 program instructions on said computer readable
4 medium for:

5 dynamically determining when a component is
6 added to a node of a network; and

7 in response to said dynamically determining
8 step, configuring said network to provide support
9 for said component.

10 18. The computer program product of Claim 17, further
11 comprising program instructions for:

12 registering an OS with an management system of said
13 network to provide a notification when said component is
14 added; and

15 alerting said OS that said component is added during
16 said configuring step.

17 19. The computer program product of Claim 18 further
18 comprising program instructions for associating said
19 component to at least one partition and to an OS within
20 said at least one partition.

21 20. The computer program product of Claim 19, further
22 comprising program instructions for:

23 detecting a partition of said network to which said
24 component has been associated; and

5 notifying said OS of said component only when said
6 OS is also associated with said partition.

1 21. The computer program product of Claim 19, further
2 comprising program instructions for:

3 detecting a partition of said network to which said
4 component has been associated; and

5 notifying said OS only when said OS has access
6 permission for said partition and said component.

1 22. The computer program product of Claim 21, further
2 comprising program instructions for:

3 updating a component table available to said OS with
4 information about said component; and

5 providing OS support to all components registered in
said component table.